

What is claimed is:

1. A multi-layered complementary wire structure, comprising:

at least a first wire, comprising:

5 a first main line;

 a plurality of first branch lines; and

 a plurality of contact holes used to connect the first main line and the first
branch lines; and

at least a second wire, comprising:

10 a second main line;

 a plurality of second branch lines; and

 a plurality of contact holes used to connect the second main line and the
second branch lines,

wherein, the first main line is insulated and crossed with the second main line, the
15 first main line is insulated from the second branch lines, the first main line and the
second branch lines are located in a first conductive material layer, the second main
line is insulated from the first branch lines, and the second main line and the first
branch lines are located in a second conductive material layer.

20 2. The multi-layered complementary wire structure according to claim 1, wherein
the first main line is perpendicularly crossed with the second main line.

25 3. The multi-layered complementary wire structure according to claim 1, wherein
each of the first branch lines is connected to the first main line by two of the first
contact holes.

4. The multi-layered complementary wire structure according to claim 1, wherein each of the second branch lines is connected to the second main line by two of the second contact holes.

5

5. A matrix structure of a display, comprising:

✓

a substrate;

a plurality of pixel units arranged in a matrix and located on the substrate, wherein the pixel units are separated by a plurality of gate lines vertically parallelized and separated, and a plurality of data lines laterally parallelized and separated, wherein:

10

each of the gate lines comprises:

a first main line;

a plurality of first branch lines parallel to the first main line; and

a plurality of first contact holes mutually parallel, wherein the first contact holes are used to connect to the first main line and the first branch lines; and

15

each of the data lines comprises:

a second main line;

a plurality of second branch lines parallel to the second main line; and

20 a plurality of second contact holes mutually parallel, wherein the second contact holes are used to connect to the second main line and the second branch lines;

wherein, the first main line is insulated and crossed with the second main line, the first main line is insulated from the second branch lines, the first main line and the second branch lines are located in a first conductive material layer, the second main line is insulated from the first branch lines, and the second main line and the first branch lines are located in a second conductive material layer.

25

6. The matrix structure of the display according to claim 5, wherein each of the
pixel units comprises a thin film transistor structure.
- 5 7. The matrix structure of the display according to claim 5, wherein the gate lines
are perpendicularly crossed with the data lines.
8. The matrix structure of the display according to claim 5, wherein each of the
first branch lines is connected to the first main line by two of the first contact holes.
- 10 9. The matrix structure of the display according to claim 5, wherein each of the
second branch lines is connected to the second main line by two of the second contact
holes.
- 15 10. A method for manufacturing a multi-layered complementary wire structure,
comprising:
 forming a first conductive material layer on a substrate;
 patterning the first conductive material layer to form at least a first main line and a
plurality of first branch lines, wherein the first branch lines are respectively located on
20 two sides of the first main line and in-line arranged, and the first main line is insulated
from the first branch lines, the first main line is a first part of a first wire, and the first
branch lines are a first part of a second wire;
 forming a insulating layer on the first conductive material layer and the substrate;
 patterning the insulating layer to form a plurality of first contact holes and a
25 plurality of second contact holes, and the first contact holes expose a portion of the first

- main line, and the second contact holes expose a portion of each of the first branch lines;
- forming a second conductive material layer to cover the insulating layer and fill the first contact holes and the second contact holes ; and
- 5 patterning the second conductive material layer to form at least a second main line and a plurality of second branch lines, wherein the second branch lines are in-line arranged and respectively located on two sides of the second main line, and the second main line is insulated from the second branch lines, the second main line is a second part of the second wire and the second branch lines are a second part of the first wire,
- 10 and the second main line is located above the first branch lines and the second branch lines are located above the first main line.

11. The method for manufacturing the multi-layered complementary wire structure according to claim 10, wherein the first main line is perpendicularly crossed
15 with the second main line.